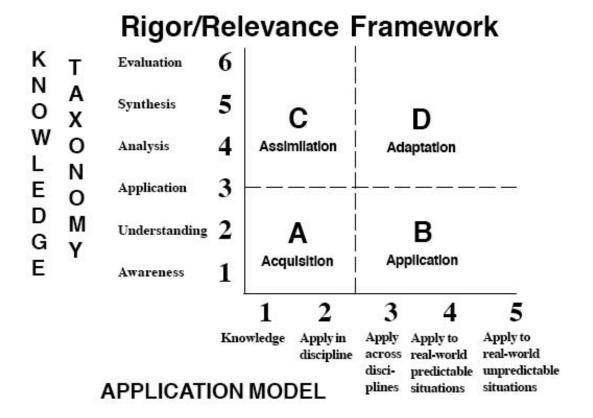


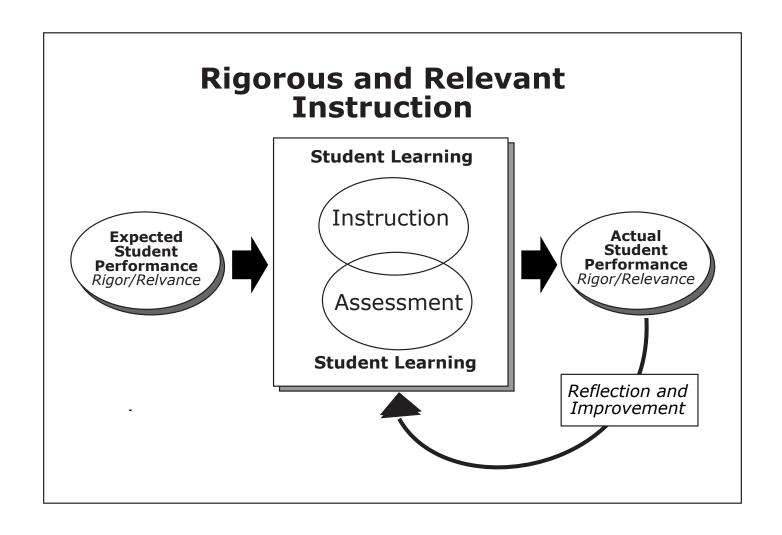
Using the R/R Framework for Planning and Instruction

Richard D. Jones

Senior Consultant email: dick@leadered.com

International Center for Leadership in Education 1587 Route 146, Rexford, NY 12148 (518) 399 2776 http://www.LeaderEd.com





Rigor/Relevance Framework

Worksheet

ΛY	Evaluation	6
ONO	Synthesis	5
TAX(Analysis	4
DGE	Application	3
WLE	Comprehension	2
KNO	Awareness	1

C - Assim	ilation	D	- Adaptation	
A - Acqu	aisition	В	- Application	
1	2	3	4	5
Knowledge in one discipline	Apply in one discipline	Apply across discipline	Apply to real-world predictable	Apply to real-world unpredictable



APPLICATION MODEL

situations

situations

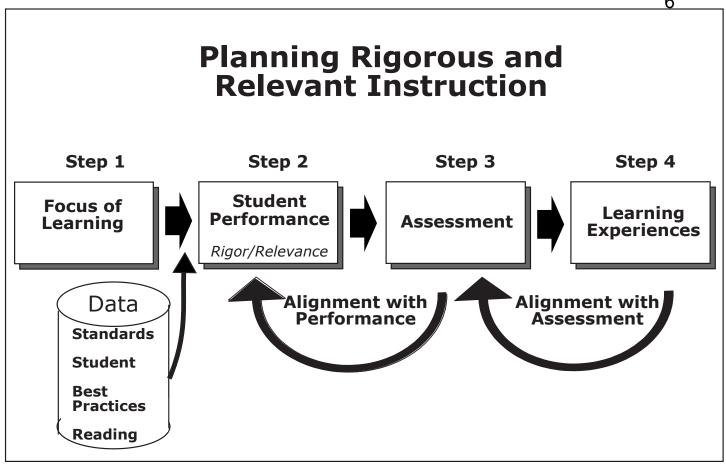
Planning Rigorous and Relevant Instruction
Test Question Development
Directions: In the first box, develop a test question. Use the second box to revise the question at a higher level of knowledge and/or application.
Test Question
Revised Question

Relationship of Assessments to the Rigor/Relevance Framework

Quadrant C Assimilation Quadrant D Adaptation 6 **Primary Primary Extended Response** Portfolio **Product Performance Product Performance** Interview Self-reflection Secondary Process Performance Secondary Constructed Response Portfolio • Extended Response Self-reflection **Process Performance** Multiple Choice Quadrant **A** Acquisition Quadrant B Application **Primary Primary** • Multiple Choice **Process Performance** Constructed Response **Product Performance** Secondary Secondary **Process Performance** Interview Extended Response Constructed Response Self-reflection Multiple Choice Portfolio Self-reflection

Primary = Best Match

Secondary = Also Appropriate



Questions

- **Step 1 Focus** What defines or drives the learning experience?
- **Step 2 Student Performance -** What are students expected to know, do or be like and at what level of rigor and relevance?
- **Step 3 Assessment -** How will you assess desired student performance?
- **Step 4 Learning Experience -** What activities will enable students to achieve student performance?

EXAMPLES OF STUDENT WORK

- Advertisement
- AUDIOTAPE
- Autobiography
- Banner
- BIOGRAPHY
- Brochure
- Business
- CARTOON
- Chart
- CHILDREN'S BOOK
- Coat of arms
- Collection
- Community service
- Composition
- Constitution
- Construction
- Contract
- Correspondence
- Crossword Puzzle
- Debate
- Defense
- Demonstration
- Design
- Diagram
- DIORAMA
- DISCUSSION
- DISPLAY
- DRAMATIZATION
- Drawing
- Editorial
- Essay
- Eulogy
- EVALUATION

- Ехнівіт
- EXPERIMENT
- Fable
- Family tree
- FIELD GUIDE
- FLAG
- Game
- Graph
- Icon
- Interview
- Invention
- Joke
- Journal
- Letter
- Log
- MACHINE
- MAGAZINE
- Manufacturing process
- MAP
- Memo
- Memoir
- MNEMONIC
- Model
- Mosaic
- Mural
- News report
- Newspaper
- Oral history
- Oral report
- Painting
- PETITION
- Рното асвим
- PLAY
- POEM

- Poster
- Production process
- Proposal
- Puppets
- QUESTIONNAIRE
- QUESTIONS
- RAP
- Relief map
- Research report
- Resume
- Rules
- Scale model
- SCRAPBOOK
- SCRIPT
- Sculpture
- Shadow box
- Sketch
- SKIT
- SLIDE SHOW
- SOFTWARE APPLICATION
- SOLUTION
- Song
- Speech
- Story
- Survey
- TAXONOMY
- TEACH A LESSON
- Test
- Theory
- TIME CAPSULE
- TOTEM POLE
- VIDEOTAPE
- Website



Practice Linking Standards and Student Work

Directions: For each of the standards, list student work that would enable students to learn that standard. Start with a generic type of student work and complete the item with a specific task related to that area of learning.

Example:

Standard/Topic

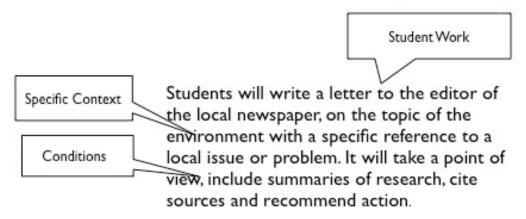
use maps and scale drawings to represent real objects or places

Student Work

construct a scale model of a house

Standard/Topic	Student Work
Apply in writing the rules of grammar, punctuation and spelling	
Gather information from a variety of sources and summarize and analyze	
Follow oral directions	
Know how to decipher unfamiliar words	
Perform operations with numbers including decimals, ratios, percents, and fractions	
Understand characteristics of parallel lines	
Understand best procedures for statistical data collection, organization, and display	
Understand how and why rotation and revolution of Earth affect day, seasons, and weather	
Understand systems of human body	
Make observation of the local environment using senses and instruments	

Writing Performance Tasks



A performance task is a description of how a student is expected to demonstrate understanding, knowledge and skills. The task may be a product, performance or extended writing that requires rigorous thinking and relevant application. It is usually written in the third person describing the learning to other educators.

Performance tasks include;

- · student work that will be produced or performed
- whether group or individual
- Specific learning context
- resources students will be provided or have to acquire
- setting where students will complete the work
- conditions (often real world) under which the work will be done

Performance tasks usually do not include;

- assessment. A performance-based implies but does not specify how the performance will be assessed.
- specific direction to the student
- specific equipment list
- homework or reading assignments

Worksheet Defining Performance Task

Unit Title				
Author		Date		
	orainstorming stude ork that <u>possibly</u> cou	_		1 0
culmination of th specific context t	□ Drawing □ Editorial □ Exhibit □ Experiment □ Field guide □ Graph □ Interview □ Invention □ Journal □ Letter □ Log □ Machine □ Magazine □ Manufacturing process □ Map □ Memo write a student perye unit. Select the aptical states the worked will make this a higher	ppropriate student was to the desired lead	work, describe the rning and list the	□ Song □ Speech □ Story □ Survey □ Taxonomy □ Teach a lesson □ Test □ Videotape □ Website Rigor/Relevance Framework C D A B Low Relevance Migh
		Performance Task		

RIGOROUS AND RELEVANT STUDENT PERFORMANCES

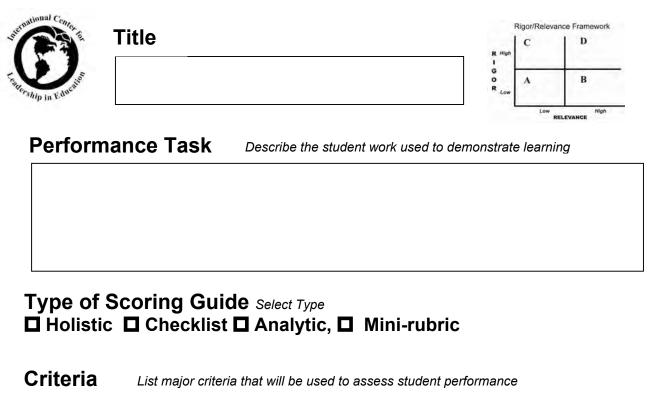
Thernational Center E	T:41 -								Rigor/Releva	ance Framework
	Title							R High	C	D
								G O		<u> </u>
Edership in Education								R Low	A	В
-								'	Low	High RELEVANCE
ocus	Identify :	subject, d	course, un	it and stu	dents to	be served	1			
Student L	_earnin	ig Ide	entify cond	cepts, kno	wledge,	skills and	behavior	s		
	_	_								
Performa	nce Ta	ISK	Describe	e the stud	ent work	used to d	lemonstra	ate lea	rning	
Standard	S Lii	nk this le	sson to st	ate or nat	ional sta	ndards or	Internation	onal C	enter E	ssential Skills
	<u>.</u>									
Sour										
Subjec										
Standa	ards									

Scoring Guide Attach copies of scoring guide or rubric to assess performance task

Exemplars (optional) Attach copies, descriptions or images of exemplary student work

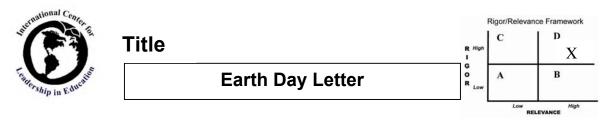
Lesson Plan (optional) Attach copies of teacher procedures and student activities

RIGOROUS AND RELEVANT STUDENT ASSESSMENTS



Scoring Guide Draft Scoring Guide for this Performance Task

RIGOROUS AND RELEVANT LESSONS



Focus

Identify subject, course, unit and students to be served

Sixth Grade Interdisciplinary English Language Arts - Unit on Writing Conventions Science – Unit on Environment

Student Learning Identify concepts, knowledge, skills and behaviors

Concepts	Skills	Knowledge	Behaviors
◆ Point of View	♦ Writing w/ correct	◆ Environmental	◆ Recycling
◆ Research	grammar	Advocacy Groups	◆ Protecting the
◆ Endangered	♦ Writing with Point of	◆ Major	Environment
species	View	Environmental	
◆ Pollution	◆ Citing authentic	Issues	
◆ Individual	sources	◆ Local Environmental	
responsibility		Issues	

Performance Task

Describe the student work used to demonstrate learning

Students will write a letter to the editor of the local newspaper, on the topic of the environment with a specific reference to a local issue or problem. It will take a point of view, include summaries of research, cite sources and recommend action.

Standards Link this lesson to state or national standards or Essential Skills

Source	Essential Skills
Subject	English Language Arts and Science
Standards	(e1) Apply in writing the rules and conventions of grammar, usage, punctuation, paragraphing and spelling.
	(e3) Gather information from a variety of sources, including electronic sources, and summarize, analyze, and evaluate its use for a report.
	(s6) Understand how humans, through technology, cause environmental change by disrupting the equilibrium or balance of nature by introducing pollutants into the environment.
	(s10) Understand the human impact on the environment through pollution (air, water, and soil), and ways to improve it through education, research, laws, and conservation.

Scoring Guide

Attach copies of scoring guide to assess student performance

Lesson Plan

Attach copies of teacher procedures and student activities -Optional

Sample Analytic Scoring Guide 3

Letter to the Editor

Criteria	1	2	3	4	Your Score
	The letter seemed to be a collection of unrelated	Ideas were somewhat organized, but	Ideas were expressed in a pretty clear	Ideas were expressed in a clear and organized	1
Ideas	sentences. It was very difficult to figure out what the letter was about.	were not very clear. It took more than one reading to figure out what the letter was about.	manner, but the organization could have been better.	fashion. It was easy to figure out what the letter was about.	2 3 4
	Letter is inappropriately informal and	Letters is clear presentation of facts, and/or an	Letter is logical and clear presentation of	Letters is logical and clear presentation of	1
Letter	confusing to read. No attempt has been made to	appropriately formal writing style.	facts, and formal writing style.	facts, and an appropriately formal writing	2
	engage the reader with a logical presentation of facts.			style. Letter is interesting to read and hold the reader's attention.	4
	Design is messy and unattractive.	Design is inconsistent. Some	Design is mostly attractive and	Design is attractive and space efficient.	1
Layout	Does not make good use of available space.	parts are attractive and space efficient, but other parts are	space efficient. Good balance of text and graphics,	Excellent balance of text and graphics	2
24,040	Poor balance of text and graphics.	not. Inconsistent or poor balance between text and	for the most part.	throughout.	3
	Text contains	graphics. Text contains some	Grammar and	Grammar and	4
	many spelling/grammar	spelling/grammar errors. Little	spelling are nearly flawless. Logical	spelling are flawless and the	1
Mechanics	errors. Sentences seem disconnected,	logical structure or flow to sentences.	sequence apparent. Some wording is	flow provides a logical pathway of	2
	and there is carelessness	Evidence of carelessness in	careless. Inconsistent in	ideas. Consistent and engaging style	3
	throughout.	writing.	style.	throughout.	4

Notes on Planning with Rigor and Relevance: Summary of Steps for Planning

Focus of Learning

- 1. Look at your Standards and Grade Level Expectations: highly assessed by your state, medium or low
- 2. Choose a context, theme or focus for the unit

Student Performance / Rigor and Relevance

- 3. Choose which quadrant you want this unit to reflect
- 4. Define the student learning using big ideas web
- 5. Write performance task

Assessment (Final, Formative and Pre)

- 6. Design the final assessment: What will student know, do and think? Check the RR Quadrant
- 7. Design formative assessments
 - Write one or two critical questions that students will answer if they do well on the final assessment? (verbs should match quadrant)
 - Order the concepts or big ideas
 - Decide how students will show you what they know, do, and think in regard to each concept when you are finished teaching. What is the ticket from one island to the next? Check quadrants, do you have enough practice at high enough levels of rigor and relevance.
- 8. Pre-assessment plan: what do students already know about content, the process/product/ performance steps on the final assessment and the level of thinking you want on the final assessment?

Learning Experiences

- 9. Develop a plan for each "chunk, concept, island" of learning
- 10. Select strategies most appropriate for this lesson, rigor/relevance and student engagements
- 11. Design lesson launching activity
- 12. Design lesson enhancements (reading, special ed, ELL)
- 13. Share great units with each other.



Great Websites for Project-Base®, Simulation, Problem-Based, and Inquiry Learning at the Secondary Level

This list was prepared for the benefit of schools in the Successful Practices Network.

Directions: Copy and then paste these sites into your browser.

Mixed (Integrated) Topics:

Jamie MacKenzie's site: http://www.fno.org/integrated technology ideas and links to other sites

http://pblchecklist.4teachers.org/ Great source of links to other sites, resources for building assessments for project based learning

http://www.edutopia.org/php/keyword.php?id=037 There is a newsletter on project based learning from Edutopia, free to educators currently employed in a district.

Lots on interesting units and lessons by content area, some integrated: http://www.rmcdenver.com/useguide/pbl.htm

http://eduscapes.com/tap/topic43.htm Good links and ideas across content areas and courses

http://college.hmco.com/education/pbl/index.html Contains a few well done lessons for science and social studies that incorporate use of technology and media

http://www.internet4classrooms.com/project.htm More good resources

Bio Tech curriculum: http://cse.edc.org/products/curricula/biotech/default.asp

Simulations: http://www.icons.umd.edu/staff/website.simulation overview?id=2

More Simulations: http://www.classroominc.org/?page=our-programs&subpage=simulations

Integrated Math and Science Units: http://www2.imsa.edu/programs/pbln/

"TeachEngineering" provides more than 500 lessons and activities for teaching engineering content in K-12 science and math classes (MA) http://www.TeachEngineering.org

Science:

Mars for Educators: http://marsrovers.jpl.nasa.gov/classroom/complete lessons and unit material ready to go with good literacy integration

http://education.usgs.gov/ incredible integrated projects and inquiry lessons

Great resources: http://www.nsta.org/highschool

Great chemistry ideas: http://www.chemistryteaching.com/

More great chemistry and integrated science units: http://www.anachem.umu.se/cgibin/pointer.exe?Demonstrations

Math:

NCTM Illuminations site http://illuminations.nctm.org/

http://www.nctm.org/ Great links

http://www.ct4me.net/math_projects.htm good links and ideas for math based projects

Integrated Units with a math focus: http://www.goenc.com/

Social Studies:

History Alive site http://www.historyalive.com/resources/onlHistory.aspx

http://www.bie.org/pbl/pblhandbook/index.php Buck Institute for Education, great focus on economics and civics and other areas in socials studies, some of the resources and links applicable across content areas

http://www.ucalgary.ca/~kmkahler/67910/projectbased/#Project%20Examples Contains four really good units focused on medieval times, however, could be easily adjusted for era under study

http://www.ncss.org/lessons/ Good lessons in a variety of courses

Source for simulations and units: http://www.paachawaii.org/highschool/index.htm

English/Language Arts/Literacy:

http://www.sagrader.com/ Essay grader

<u>http://www.wired.com/wired/archive/14.06/myth.html</u> Cool unit on the myth of Superman, teaches several great themes in literature

<u>http://www.ncte.org/ Tons</u> of resources integrating literacy and technology, also integration with other courses. You may need to become a member to access all of the resources.

Integrated English and Social Studies Unit:

http://www.jimcrowhistory.org/amliterature/amliterature.htm outstanding unit, received national recognition

Technology Focus:

http://pblmm.k12.ca.us/ Great ideas and step by sep instructions for multi-media projects, cross content ideas

http://www.schoolcio.com/registration/login.jhtml?_requestid=274504 Great strategies for technology integration, you need to create a logon

http://www.techlearning.com/db_area/archives/TL/2003/01/project7.html incredible links, including one to the George Lucas Center for Educators

http://www.ncsall.net/index.php?id=160 Great ideas to build into adult focused workforce projects

<u>http://www.wested.org/pblnet/exemplary_projects.html</u> Good resources for technology infused lessons for middle and high school students across content areas

Fine Arts Connections:

http://teachers.net/mentors/art/ Connections to a variety of Blogs and resources, pick and choose carefully

http://www.goshen.edu/art/ed/art-ed-links.html Great links

Other Notes to Help You Find Ready Made Resources:

- 1. There are many websites with units, they have varying quality. It is important to take even the best unit, apply your standards and course requirements and make certain the rigor and relevance level is in the correct quadrant for the desired result.
- 2. There are other outstanding units by specific topic. Looking up Abraham Lincoln or Cell biology will get different results than just looking for project or inquiry based units. It is worth your time to explore that option.
- 3. Units can also be found by specific concept, like freedom, pattern in art, systems in science, heroes in English, accumulation in math, etc.
- 4. Government agencies and professional organizations are a great source of unit materials, problems, and simulations.



Developing High Rigor/High Relevance Lessons



The Successful Practices Network is pleased to offer a new service to schools and teachers in the Network. Many schools are excited about the Rigor and Relevant Framework as a simple but powerful tool for teachers to raise the level of their teaching. The Successful Practices Network is now offering online facilitated activities to assist teachers in developing high/rigor/high relevance lessons. This new service is called Collaborating Online for Rigor and Relevance (CORR). CORR is designed to take teachers through several steps to create high quality lessons that reinforce the use of the Rigor/Relevance Framework.

This online activity will take participating teachers through 10 steps to understand and apply the Rigor/Relevance Framework. At the conclusion of this activity all teachers will create one high rigor/high relevance (Quadrant D) lesson. These lessons will be shared with all teachers in the school and all schools in the network. CORR is designed to allow teachers to work in small groups to collaborate with other teachers in a school or district. For example you might have a group of all elementary staff, or a group of 5th grade teachers or a group of high school mathematics teachers. It is recommended the each facilitated activity include a maximum of 25 teachers. If a school has more than 25 teachers, you should set up multiple groups.

Requirements

The activity operates in a web browser format. All participating teachers will need internet access to complete the work. The ten activities can be started and completed at any time. The project is designed to require 30 hours of work. It can be done all at once or over several weeks. It allows all teachers to work at their own pace and convenient time. Any timeline or due dates are set by the facilitator.

The activities require a facilitator to guide teachers. The role of facilitator will require 40-50 hours including preparation, participation in teacher's discussion and review teacher work. facilitator should be comfortable working in the electronic environment and knowledgeable of the Rigor/Relevance framework.

Description

The purpose of CORR is to have teachers work together in an asynchronous mode to develop high quality lessons. In our experience, teachers produce better lessons when they collaborate. Because of so many significant time limitations, this project allows teachers to work together at convenient times through the use of an online management system similar to those used for online professional development. Participants in CORR will develop the following skills:

- Apply the Rigor/Relevance Framework to their instruction.
- Set expected levels of rigor and relevance for students
- Design performance tasks for a given level of rigor and relevance
- Design assessments for a given level of rigor and relevance

Each topic is designed to provide teachers with adequate background knowledge, increase collaboration and create a finished product. There are five activities in the CORR structure.



Connect is an advanced organizer activity to explain the importance of each topic and have teachers begin to think about this component of developing lessons.



Explore is background knowledge to help in preparation of this part of the lesson. It may include articles, web sites, videos, or audio. Each piece of background knowledge is broken into small segments.



Share is a discussion section that starts with a question related to the topic. Teachers contribute to the online discussion and share ideas, shaping each others perspective.



Apply is an interactive activity in which teachers apply what they know about this topic. Usually these are engaging activities that allow teachers to play a little and reinforce their knowledge.



Develop is the activity to create the pieces of the lesson. In this activity participants get feedback on their work from other teachers in their group.

The course includes the following 10 topics

- Why Rigor and Relevance
- Rigor/Relevance Framework
- Identifying Levels of Rigor and Relevance
- Teaching for the High Rigor/High Relevance
- Identifying Student Learning
- Writing Performance Tasks
- Linking to State Standards
- Assessments for High Rigor/High Relevance
- Writing lessons for High Rigor/High Relevance
- Submitting and Revising lessons



CORR Homepage Sample

Accessing CORR

The CORR project is accessible through the web address http://rigor-relevance.com. At the site you can read descriptions of the project. To get set up a participating group of teachers or get a password, contact Linda Lucey at Linda@LeaderEd.com.